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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)							February 2000		
BUDGET ACTIVITY 2 - Applied Research			PE NUMBER AND TITLE 0602307A Advanced Weapons Techn				ology A042		
COST (In Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
A042 High Energy Laser Tech	0	0	993	993	992	992	991	Continuing	Continuing

A. <u>Mission Description and Justification</u>: Recent advances in High Energy Laser Weapon Technologies for Ballistic Missile Defense may lead the way to development of Tactical Laser Weapon Systems for Army use. Potential mission areas include counter air munitions defense and airborne electro-optical sensor countermeasures. Technical issues such as lethality, laser fluence degradation due to thermal blooming and atmospheric obscurants, precision optical pointing and tracking, and low-cost laser countermeasures must be resolved before a determination for weapon system development can be made. This U.S. Army Space and Missile Defense Command project will leverage existing laser weapon technology developments such as US/Israeli Tactical High Energy Laser ACTD and the USAF Airborne Laser Program to support the evaluation and resolution of present technical issues. In addition, this project will validate potential system concepts and relevant subsystem issues to better understand potential weapon system engineering issues. The work in this program element is consistent with the Army Directed Energy Master Plan and the Army Modernization Plan. Work in this program element is related to and fully coordinated with efforts in PE 605605A (DOD High Energy Laser Systems Test Facility) and PE 0603308A (Army Missile Defense Systems Integration) in accordance with the ongoing Reliance joint planning process and contains no unwarranted duplication of effort among the Military Departments. Work is performed by SMDC, Huntsville, AL. No contracts have been awarded to date.

FY 1999 Accomplishments: Project not funded in FY 1999.

FY 2000 Planned Program: Project not funded in FY 2000.

FY 2001 Planned Program:

• 993 Identify and assess technical issues such as lethality, laser fluence degradation due to thermal blooming and atmospheric obscurants, precision optical pointing and tracking, and low-cost laser countermeasures.

Total 993

Project A042 Page 1 of 2 Pages Exhibit R-2 (PE 0602307A)

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DATE **ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)** February 2000 **BUDGET ACTIVITY** PE NUMBER AND TITLE PROJECT 0602307A Advanced Weapons Technology 2 - Applied Research A042 B. Program Change Summary FY 1999 FY 2001 FY 2000 Previous President's Budget (FY 2000 / 2001 PB) 0 0 0 Appropriated Value Adjustments to Appropriated Value a. Congressional General Reductions b. SBIR / STTR c. Omnibus or Other Above Threshold Reductions Below Threshold Reprogramming Rescissions Adjustments to Budget Years Since (FY 2000 / 2001 PB) 0 0 +993 Current Budget Submit (FY 2001 PB) 0 993 Change Summary Explanation: Funds realigned for new start (+993).

Exhibit R-2 (PE 0602307A)

Page 2 of 2 Pages

Project A042